

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Podocalyxin in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG _{2B} Clone # 192703
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Podocalyxin Ser21-Arg402 Accession # Q9R0M4
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

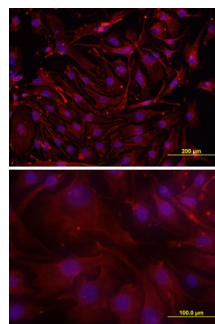
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse Podocalyxin
Flow Cytometry	2.5 µg/10 ⁶ cells	D3 mouse embryonic stem cell line
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	1-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

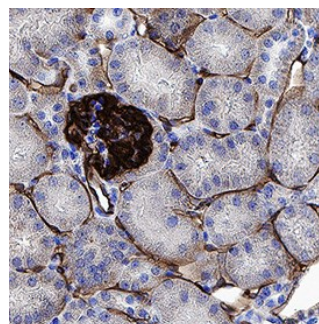
DATA

Immunocytochemistry



Podocalyxin in bEnd.3 Mouse Cell Line. Podocalyxin was detected in immersion fixed bEnd.3 mouse endothelial cell line using 10 µg/mL Rat Anti-Mouse Podocalyxin Monoclonal Antibody (Catalog # MAB1556) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Podocalyxin in Mouse Kidney Tissue. Podocalyxin was detected in perfusion fixed frozen sections of mouse kidney tissue using Rat Anti-Mouse Podocalyxin Monoclonal Antibody (Catalog # MAB1556) at 1.7 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Rat IgG VisUCyte™ HRP Polymer Antibody (brown; Catalog # VC005) and counterstained with hematoxylin (blue). Specific staining was localized to glomeruli. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Podocalyxin, also known as Podocalyxin-like protein-1 (PCLP1 or PODXL), is a type I transmembrane glycoprotein. It belongs to the CD34/Podocalyxin family of sialomucins that share structural similarity and sequence homology. Podocalyxin is a major sialoprotein in the podocytes of the kidney glomerulus and is also expressed by both endothelium and multipotent hematopoietic progenitors. It has been identified as a novel cell surface marker for hemangioblasts, the common precursors of hematopoietic and endothelial cells (1, 2).

References:

- Li, J. *et al.* (2001) DNA Seq. **12**(5):407.
- Hara, T. *et al.* (1999) Immunity **11**(5):567.